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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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EXAMINER

SCHWARTZ, JORDAN MARC

ART UNIT

PAPER NUMBER

2873

DATE MAILED: 08/27/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | |
|------------------------------|--------------------|---------------|
| Office Action Summary | Application No. | Applicant(s) |
| | 09/647,546 | FEURER ET AL. |
| | Examiner | Art Unit |
| | Jordan M. Schwartz | 2873 |

-- The MAILING DATE of this communication app ars on th cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) Responsive to communication(s) filed on 03 June 2002.

2a) This action is FINAL. 2b) This action is non-final.

3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) Claim(s) 3-18 is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) Claim(s) _____ is/are allowed.

6) Claim(s) 3-18 is/are rejected.

7) Claim(s) _____ is/are objected to.

8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) The specification is objected to by the Examiner.

10) The drawing(s) filed on _____ is/are: a) accepted or b) objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11) The proposed drawing correction filed on _____ is: a) approved b) disapproved by the Examiner.

If approved, corrected drawings are required in reply to this Office action.

12) The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a) All b) Some * c) None of:

- Certified copies of the priority documents have been received.
- Certified copies of the priority documents have been received in Application No. _____.
- Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

14) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a) The translation of the foreign language provisional application has been received.

15) Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

| | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

The specification is objected to because it has a "Brief Description of the Drawings" and references a "Figure 1" and a "Figure 2" however, no drawings were submitted with this application.

Claim Rejections - 35 USC § 112

Claims 5-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Specifically, in reference to claims 5-6, the claims state "is substituted by" which is apparently a negative limitation rendering the claims vague and indefinite. If applicant is attempting to claim that instead of a polymer the ophthalmic lens comprises "one constituent selected from the group..." then it is not clear why claims 5-6 each depend from claim 4 and not from claim 3. For purposes of examination the assumed meaning is that claims 5-6 each depend from claim 4 (as is presently claimed) and the assumed meaning of "is substituted by at least one substituent selected from the group..." is "wherein the material further comprises at least one substituent selected from the group...".

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 3-4, 7, 12-14 and 17-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Smith.

Smith reads on these claims by disclosing the limitations therein including the following: an ophthalmic lens (abstract) comprising a material having a refractive index varying in a least one direction (column 1, lines 55-68, column 3, lines 7-25); in response to a force exerted by ocular tissue (column 1, lines 55-68, column 3, lines 7-25). Smith further discloses the material comprising at least one polymer (column 5, line 21); the material as a silicon or methacrylate (column 5, line 26); the material comprising portions capable of being oriented by means of a mechanical effect (column 1, lines 55-68, column 3, lines 7-25 in that the bending of the material which is a "mechanical effect" will cause the lens surface to change its orientation); the refractive index changes due to a force exerted by a muscle of the eye, zonulae, or ocular tissue (column 1, lines 55-68); and the lens as an intraocular lens (abstract).

Claims 3-4, 8-14 and 17-18 are rejected under 35 U.S.C. 102(b) as being anticipated by Schachar patent no. 4,373,218 (hereinafter referred to as "Schachar'218").

Schachar'218 reads on these claims by disclosing the limitations therein including the following. Specifically, in reference to claim 3, applicant is broadly claiming the refractive index varying in response to a force exerted on an ocular tissue. Applicant is not claiming that the force is being exerted directly onto the material and is directly causing the changing refractive index. Therefore, Schachar'218 discloses an ophthalmic lens (abstract) comprising a material having a refractive index varying in a least one direction (column 6, lines 1-2); in response to a force exerted by ocular tissue (column 5, line 67 to column 6, line 4 i.e. the ocular tissue is exerting a force which is detected

by an electrode and is thereby causing the material to have a refractive index that varies in at least one direction). Schachar'218 further discloses the material comprising a liquid crystal (column 5, line 3). The liquid crystal material is believed to inherently be a polymer and a three dimensional material, this being reasonably based upon the well known use of liquid crystal polymers to provide changes in refractive index as well as upon Schachar'218 using this material to cause changes in the refractive index of an ophthalmic lens similar to that of the claimed invention.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 15-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Smith.

In reference to claims 15-16, Smith discloses as is set forth above and discloses the lens as an intraocular lens with the refractive index changing due to muscles in the eye and not a contact lens with the refractive index changing due to the eyelid. However, Smith teaches that the same materials used in contact lenses can be used for the claimed intraocular lenses (column 5, lines 21-39). Furthermore, it is well known in the art of lenses that the same optical principals applicable for intraocular lenses are also applicable for contact lenses. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to modify the lens of Smith to

function as a contact lens with the refractive index changing due to the eyelid since Smith teaches of intraocular lens with the refractive index changing due to muscles in the eye, that the same material used in contact lenses can be used for the intraocular lens, and further since it is well known in the art of lenses that the same optical principals applicable for intraocular lenses are also applicable for contact lenses.

Allowable Subject Matter

Claims 5-6 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: with respect to claims 5-6, none of the prior art either alone or in combination disclose or teach of the claimed combination of limitations to warrant a rejection under 35 USC 102 or 103. Specifically, with respect to claims 5-6, none of the prior art either alone or in combination disclose or teach of the claimed ophthalmic lens device comprising a material having an optical refractive index varying in at least one direction in response to a force exerted by an ocular tissue, the material comprising at least one polymer and further wherein the material further comprises at least one substituent selected from the groups as claimed.

Response to Arguments

Applicant's arguments filed June 3, 2002 have been fully considered but, with respect to the Smith and Schachar'218 references, they are not persuasive. Specifically, with reference to Smith, applicant argues that Smith discloses the curvature

of the lens being modified and not a material having a refractive index that varies in response to a force. However, the mere changing of the curvature of the lens will not cause the refractive index to change and therefore, the change in refractive index must be due to changes within the material. Concerning the Schachar'218 reference, applicant argues that the present invention does not require an electromechanical device. However, applicant has not claimed this as a limitation. Instead, as stated in the rejection above, applicant is broadly claiming the refractive index varying in response to a force exerted on an ocular tissue. Applicant is not claiming that the force is being exerted directly onto the material i.e. without an electromechanical device. Therefore, the Schachar'218 reference reads on the claims as set forth in the rejection above.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jordan M. Schwartz whose telephone number is (703) 308-1286. The examiner can normally be reached on Monday to Friday (8:00-5:30), alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Georgia Y. Epps can be reached at (703) 308-4883. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.



Jordan M. Schwartz
Primary Examiner
Art Unit 2873
August 22, 2002